



MICROVISION



SHOWWX™

LASER PICO PROJECTOR

User Guide



IMAGE BY
PICOP®

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Important Safety Information

PLEASE READ, UNDERSTAND AND FOLLOW ALL SAFETY INFORMATION IN THIS USER GUIDE BEFORE YOU USE THIS PROJECTOR. FAILURE TO PROPERLY SET UP, USE, AND CARE FOR THIS PROJECTOR CAN INCREASE THE RISK OF INJURY, OR DAMAGE TO THE PROJECTOR. KEEP THIS USER GUIDE FOR FUTURE REFERENCE.

Intended Use Statement

The SHOWWX™ laser pico projector is designed to operate with the Microvision-specified battery and Microvision battery charger in a normal office and home environment within the following parameters:

- » Operating Temperature: 10° - 30° C, (50° - 86° F)
- » Storage Temperature: non-operating: -20° - 60° C, (-4° - 140° F) with battery
- » Humidity: 10 - 85% relative humidity (without condensation)
- » Altitude: -152M - 4572M (500 - 15,000 ft.)



WARNING

Indicates a potentially hazardous situation, which if not avoided, may result in death or serious injury and/or property damage.

AS WITH ANY BRIGHT LIGHT SOURCE, DO NOT STARE INTO THE BEAM. STARING INTO THE BEAM COULD CAUSE EYE DISCOMFORT AND IMPAIR VISION.

AS WITH ANY PRODUCT CONTAINING LASERS, DO NOT DISASSEMBLE THE PROJECTOR FOR ANY REASON. DISSASSEMBLING THE PROJECTOR MAY RESULT IN HAZARDOUS LASER RADIATION EXPOSURE.

EXCEPT FOR OPENING THE BATTERY DOOR AS DIRECTED IN THIS USER GUIDE TO REPLACE THE BATTERY, THERE ARE NO USER SERVICABLE PARTS INSIDE THE PROJECTOR.

For service or repair the product must be returned to an authorized repair facility. See Customer Support section within this User Guide for details.

To avoid risks associated with laser exposure:

- » Not recommended for use by children under 14 unless supervised by an adult. The SHOWWX is not a toy.
- » Use of controls or adjustments or performance of procedures other than those specified in this User Guide may result in hazardous laser radiation exposure

To avoid risks associated with hazardous voltage:

- » Do not modify this product in any way. Use only Microvision approved replacement components.
- » Do not use the AC adapter in a wet environment.
- » No not use with a damaged AC adapter. Replace damaged AC adapter prior to use.

To avoid risks associated with fire and explosion:

- » Do not immerse the projector or battery in any liquid or allow either to get wet.
- » Use only AC adapter and battery provided by Microvision.
- » Do not disassemble the battery or modify it in any way.
- » Do not attempt to short out the battery.

- » Do not expose the battery to temperatures under -20°C or above 60°C.
- » Do not crush the battery.
- » Do not overcharge or rapidly discharge the battery.
- » Do not dispose of the battery by incineration or fire.
- » Do not expose the projector or battery to direct sunlight in a closed space such as a vehicle.

To avoid risks of other injuries:

- » Do not handle a damaged or leaking battery pack.
- » Do not handle a battery that has been handled in an inappropriate or dangerous manner.

To avoid risks associated with driver distraction in a moving vehicle:

- » Do not use this projector in a moving vehicle in a manner that may distract the driver.



Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury and/or property damage.

- » Do not point the projected image at people, vehicles, or aircraft.
- » Risk of explosion if battery is replaced by an incorrect type.
- » Dispose of used batteries according to the instructions contained within this guide.

To avoid risks associated with environmental contamination:

- » Dispose of all system components in accordance with applicable government regulations.

To avoid risks associated with tripping and falling:

- » Position the charging cord and data cables so that they can not be tripped over.

Photosensitive Seizure Warning

A very small percentage of people may experience seizures or blackouts that are triggered by exposure to light flashes or certain visual images including flashing lights or patterns that may appear in video games or other video images. Even people who have no history of seizures or blackouts could experience "photosensitive epileptic seizures" while watching some video images.

Immediately stop watching projected video images and consult a physician if you experience symptoms such as lightheadedness, altered vision, eye or face twitching, convulsions, disorientation, confusion or momentary loss of awareness.

Taking the following precautions while watching video may help reduce the risk of photosensitive epileptic seizures.

- » Avoid use while tired or fatigued.
- » Take frequent breaks.
- » Look away from the screen from time to time.
- » Sit further away from the projected image.

Safety Labels

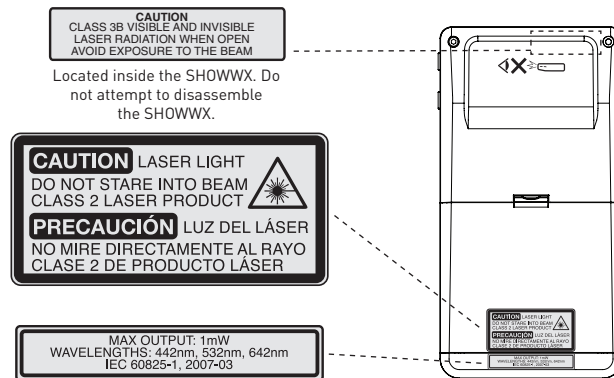
The SHOWWX™ Laser Pico Projector is a CLASS 2 LASER PRODUCT as defined in IEC 60825-1, 2007-03. Microvision has designed the SHOWWX to be safe for general use as a mobile projector.

IEC and CDRH Statements of Compliance

The SHOWWX complies with IEC 60825-1, 2007-03. The device also complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50 dated June 24, 2007.

The following safety labels are affixed at the factory.

THESE LABELS CONTAIN IMPORTANT SAFETY INFORMATION. DO NOT REMOVE THEM.



Bottom View

Laser Specifications

Laser Color	Red		Blue		Green	
Laser Type	AlGaInP laser diode		GaN laser diode		Frequency doubled IR laser diode	
Max CW Output	90 mW		50 mW		60 mW	
Divergence Slow-Axis	7°, FWHM	13°, FWHM	4°, FWHM	15°, FWHM	5°, 1/e ²	10°, 1/e ²
Divergence Fast-axis	16°, FWHM	24°, FWHM	15°, FWHM	25°, FWHM	12°, 1/e ²	18°, 1/e ²
Wavelength	635 nm	645 nm	440 nm	460 nm	526 nm	537 nm

FCC Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference (2) this device must accept any interference received including interference that may cause undesired operations. This applies to all product options.

FCC Radio Frequency Interference Statement

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- » Reorient or relocate the receiving antenna.
- » Increase the separation between the equipment and receiver.
- » Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- » Consult the dealer or an experienced radio/TV technician for help. To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons. This transmitter must not be collocated or operating in conjunction with any other antenna or transmitter.

Caution: Changes or modifications to this equipment not expressly approved by manufacturer could void the user's authority to operate this equipment.

CE Statement

This product complies with the requirements of the Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC and carries the CE mark accordingly.

Directions for Recycling Battery

Recycle battery in accordance with local laws. In the United States and Canada, visit www.call2recycle.org or call 1-800-8-BATTERY (1-800-822-8837) or 1-877-2-RECYCLE (1-877-273-2925) for the nearest recycling center.

Product Disposal

The SHOWWX™ laser pico projector should not be placed in household waste bins. Please check local regulations for information about the disposal of electronic products in your area.

Made for iPod®

"Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Copyright & Trademarks

© 2009 Microvision, Inc. All rights reserved. iPod, and Made for iPod are trademarks of Apple, Inc., registered in the U. S. and other countries. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. The Microvision "swirl", PicoP and SHOWWX are trademarks of Microvision, Inc.

Package Contents

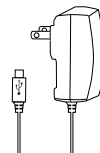
Please make sure you have received all items included with the product. For missing items contact customer support.



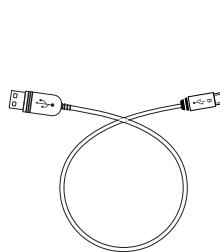
SHOWWX
Rechargeable Battery



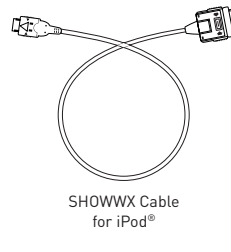
SHOWWX
Laser Pico Projector



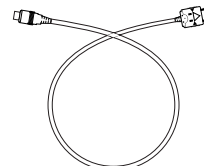
SHOWWX
Wall Charger



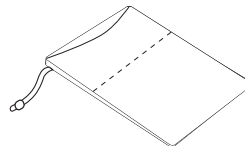
Micro-USB Cable



SHOWWX Cable
for iPod®



SHOWWX
Composite Adapter



Storage Pouch

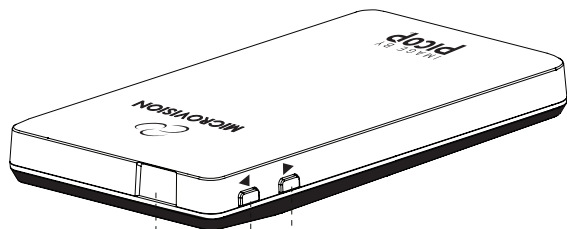


User Guide



Wrist Strap

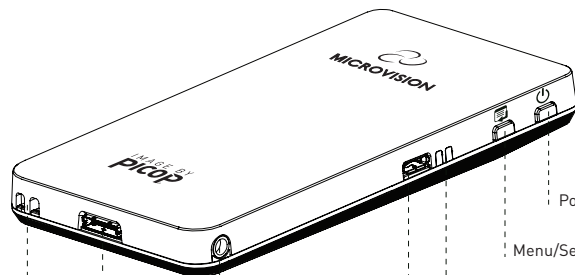
SHOWWX™ Laser Pico Projector



Window

Down/Hot Key 2

Up/Hot Key 1



Power Button

Menu/Select Button

LED Indicators

Micro-USB/Power Input

Video Input

3.5 mm Audio Jack

Wrist Strap Holder

Introduction

Thank you for purchasing the Microvision SHOWWX™ laser pico projector. The SHOWWX projects big, bright, and colorful images that are always in focus, yet is small enough to fit in your pocket. Connect the SHOWWX to a video output-capable device to spontaneously share photos and videos, presentations and more, in a big screen experience.

SHOWWX™
LASER PICO PROJECTOR

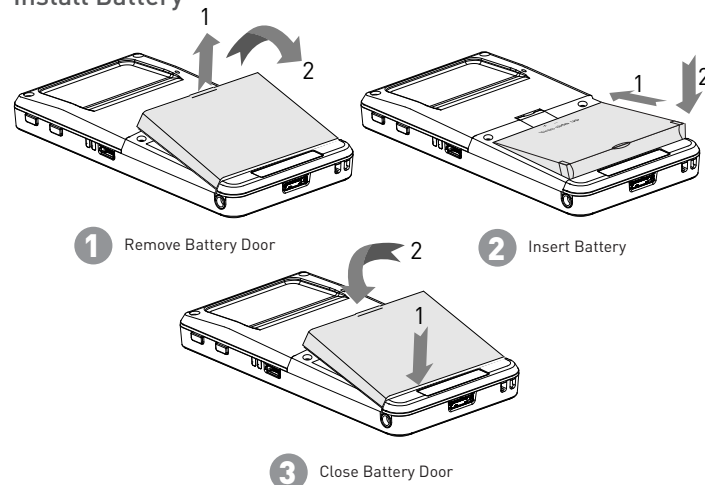
What is the PicoP® Display Engine?

The PicoP display engine is the world's first ultra miniature laser-based projector engine. It uses red, green and blue laser light sources, electronics, optics, and a unique, tiny mirror-like device that "paints" the image line-by-line on the projection surface.

IMAGE BY
PICOP®

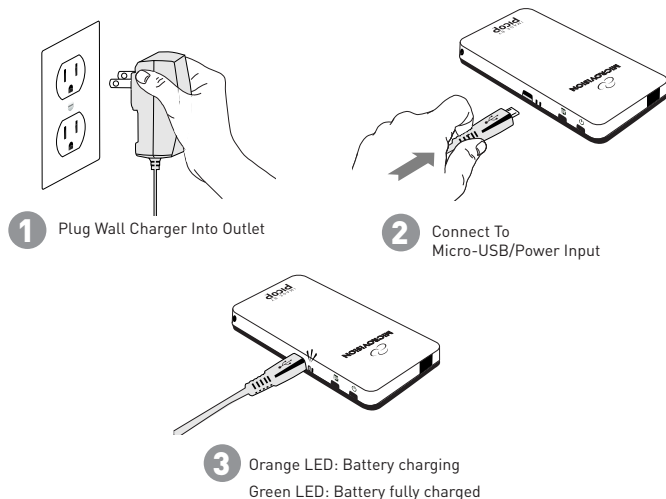
Getting Started

Install Battery



- » Make sure the projector is OFF and unplugged before replacing battery.
- » Do not force the battery in. Make sure the battery + / - symbols are lined up.

Charge Battery



Note:

- » Allow for a minimum of 4 hours charging before first time use.
- » The wall charger will not charge the battery while the SHOWWX is powered ON.
- » The supplied battery is designed specifically for the SHOWWX and no other battery should be used.

Power ON or OFF

Note: Do not have the SHOWWX connected to any video device before turning ON.

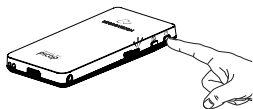
Turning ON: Press and hold the  button.

The blue LED will come on and the image will appear in about 15 seconds.

Turning OFF: Press the  button.

Note:

- » During startup the image will flash with a series of different colors. This is normal.
- » A blinking Blue LED indicates the unit is starting up. A solid Blue LED indicates the unit is ready for use.



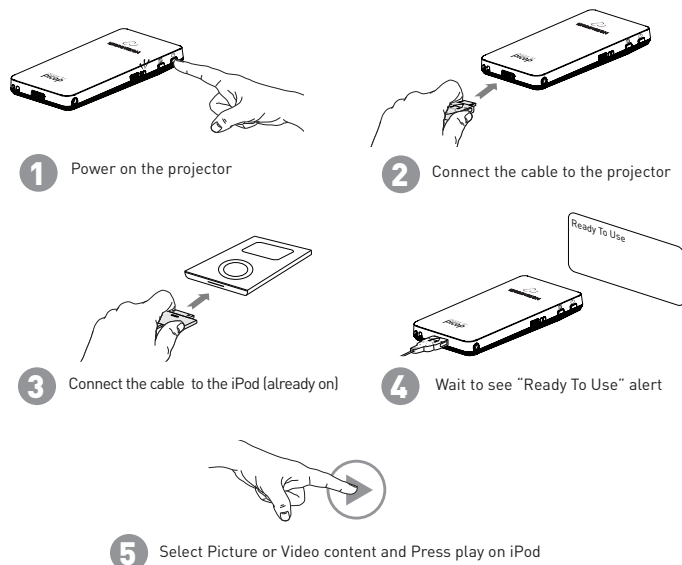
Connect to a Video Source

The SHOWWX™ can connect to a variety of devices with TV-out such as an iPod®, a laptop, cell phone, camera, and more. The following describes the connectivity options available with the SHOWWX.

Cable	Connect SHOWWX to...	Included	Sold Separately
SHOWWX Cable for iPod	iPod with Component TV-out	Yes	Yes
SHOWWX Composite Video Adapter (NTSC/PAL)	Any device with a male RCA Video out connection	Yes	Yes
SHOWWX VGA Dock	Laptop and PC devices	No	Yes

To see compatible devices with the SHOWWX visit <http://www.microvision.com/showwx/learn.html>

How to Connect to an Apple iPod®

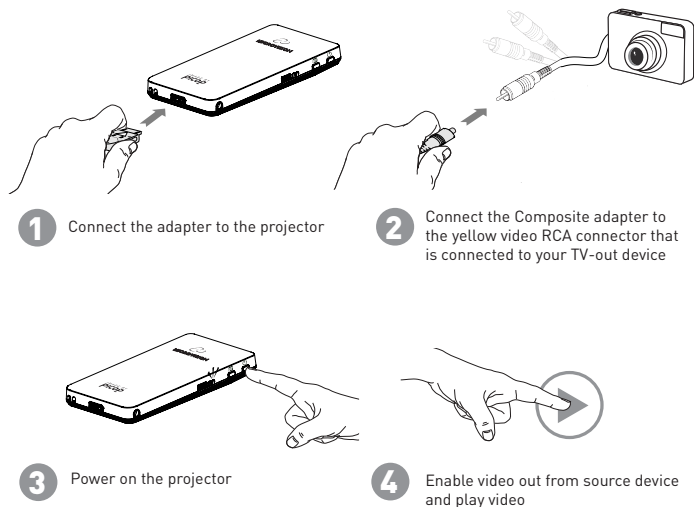


Note:

- » While connected to an iPod, the Audio Jack on the iPod can also be used.
- » To see compatible devices with the SHOWWX visit <http://www.microvision.com/showwx/>

Connecting to Other Composite (TV-out) Video Sources

The SHOWWX can connect to other video sources that have Composite (TV-out) using the included Composite adapter. To display content, make sure the source device has TV-out set to "ON" or "Enabled". To learn if your video source device is capable of TV-out and how to enable, refer to its User Guide.



Usage Guidelines

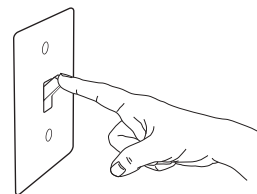
There are two main factors to consider when using the SHOWWX.

Ambient light

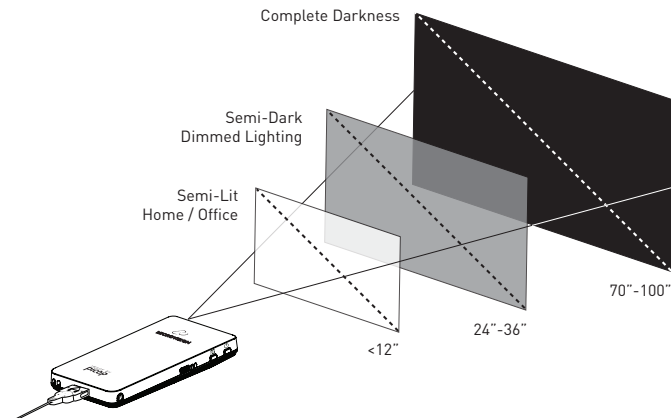
- » It is recommended to shut blinds, close curtains and turn lights down to make the room dark so the projected image looks the best.

Distance from screen

- » The projector distance from the screen will impact the appearance of the image brightness. The closer to the screen the brighter the image will appear.



The following is a guideline of what image sizes are possible under various lighting conditions:



Note: Image diagonal is approximately equal to the distance from the projector to the screen.

Advanced Controls

Menu Controls

The SHOWWX was designed as a plug-and-play device, however, some users may want to make adjustments to the settings such as change colors, adjust aspect ratio, and adjust brightness. The following information will help you understand how to fully operate the SHOWWX.

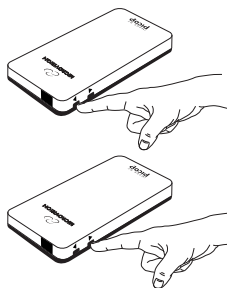
Hot Keys

The SHOWWX includes two hot keys to allow the user to quickly adjust the image depending on the type of content being shown.

Color Mode: Color mode can be changed without going into the Menu screen by pressing the ◀ button to change the color mode. Press the ▶ button to cycle through the color modes.

Gamma Mode: Gamma mode can be changed without going into the Menu screen by pressing on the ▶ button. Press the ▶ button to cycle through the gamma modes.

Note: The Color Mode hot key also includes the ability to invert the image. Inverting the image may improve the readability of certain images. Also, if the content background is predominately white, then inverting the image (e.g., white becomes black) will extend battery life.



Onscreen Menu

The SHOWWX has an onscreen display to allow the user the ability to make advanced changes to the projector. All settings changed by the user will remain even when powered off.

Brightness:	High (default) / Medium / Low
Color Mode:	Brilliant (default) / Standard / Inverted / Gamma
Aspect Ratio:	Widescreen (default) / Normal / Zoom
System:	Image Alignment / Color Alignment / Properties / Reset Defaults

How To Adjust Brightness

The image brightness can be reduced for close distance viewing in darker environments.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the ◀ or ▶ buttons to navigate to BRIGHTNESS and press .
- 3 Select the desired setting and press  to accept.

How to Change Color Mode

The SHOWWX has 3 default color modes.

Brilliant Colors:	Bright and vivid colors.
Standard Colors:	More accurate flesh tones and grey scales.
Inverted Colors:	All colors are inverted. Useful for presentations with black text on white backgrounds.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the ◀ or ▶ buttons to navigate to COLOR MODE and press .
- 3 Select the desired setting and press  to accept.

How To Adjust Aspect Ratio

The image may appear cropped or skinny. The aspect ratio may be different from the video source device.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the ◀ or ▶ buttons to navigate to ASPECT RATIO and press .
- 3 Select the desired setting and press  to accept.

How To Adjust the Image Alignment

The image may appear to be slightly fuzzy. Adjustment of the image alignment may be necessary.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the ◀ or ▶ buttons to navigate to SYSTEM and press .
- 3 Navigate to IMAGE ALIGNMENT and press .
- 4 Press the ◀ or ▶ buttons to adjust the image until all vertical lines appear sharp and clear.

How To Reset Default Settings

To reset all user selectable settings to factory defaults.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the  or  buttons to navigate to SYSTEM and press .
- 3 Use the  or  buttons to navigate to RESET DEFAULTS and press .
- 4 Press the  or  buttons to select YES and press .

How to Check Remaining Battery Life

Follow these instructions to view how much battery life is remaining.

- 1 Press the  button to bring up the on screen menu.
- 2 Use the  or  buttons to navigate to SYSTEM and press .
- 3 Use the  or  buttons to navigate to PROPERTIES and press .
- 4 Use the  or  buttons to navigate to BATTERY INFORMATION and press .

Care & Maintenance

How To Clean the Window

Fingerprints and other debris may impact the image quality. Keep the window clean for best image quality.

- 1 Apply a non-abrasive camera lens cleaner to a soft, dry cloth.
- 2 Lightly wipe the cleaning cloth over the window until clean.

Note:

- » Do not attempt to use solvents or other harsh chemicals as it may damage the window.
- » Make sure cleaning cloth is free of dust or debris to avoid scratching the window.

How to Store & Transport

Proper care should be taken to safely store and transport the projector. To store and transport the SHOWWX use the included storage pouch. Use care and do not drop the SHOWWX or spill liquids on it.

How to Use the Audio Jack

The audio jack on the SHOWWX works only when the Audio signal is combined with the Video signal. The Audio Jack is for output only.

Troubleshooting

Problem	Cause	Solution
The projector does not turn on.	Battery not inserted correctly. Battery not charged.	Make sure the battery is correctly inserted. Make sure the battery is fully charged.
The projector colors look incorrect.	Different Color Mode may be selected.	Change to preferred Color Mode.
The projector randomly turns off but the Blue LED stays on.	The projector may be out of the recommended operating range.	Make sure the projector is well ventilated and within the operating temperature range. Turn off for 5 minutes and restart.
Not working with my iPod.	Incompatible iPod, - OR - Incorrect video mode.	Make sure the iPod has TV-out functionality and is enabled. Make sure the SHOWWX video mode is correct for the cable being used.
The projector won't turn off or on and the Blue LED stays on.	System is frozen.	Press and hold the Power button for 20 seconds. If this does not work, remove battery. Then re-insert and turn on.
I can't connect to my laptop.	SHOWWX VGA Dock sold separately.	Purchase the SHOWWX VGA Dock.
The projector doesn't work with my cell phone.	Not all cell phones have the TV-out feature.	Refer to your cell phone manufacturer's user guide if TV-out is available and how to configure.
The image looks a little fuzzy.	Debris on Window, - OR - Image is misaligned.	Clean the Window, -OR- Adjust Image Alignment.
The green LED keeps blinking while charging.	The battery is not correctly inserted in the SHOWWX.	Make sure battery is correctly inserted into the SHOWWX.
The red LED is blinking.	Out of operating range. Temporary problem.	Turn projector off. Remove battery. Re-insert and power on.
Battery doesn't charge.	Battery may not be capable of holding a charge.	Install new battery.
The red LED is constantly on even after trying to restart.	System failure.	Contact Customer Support.

LED Status & Meaning

LED Status	Meaning
Solid Blue	SHOWWX is powered on
Blinking Blue	SHOWWX is powering up
Solid Orange	Battery is charging
Solid Green	Battery is fully charged
Blinking Orange	Battery is low
Blinking Red	Temporary problem
Solid Red	System failure

Customer Support

For Technical Questions, service and support please visit us online at <http://www.microvision.com/showwx/support/>

Please have your Serial Number and purchase information available. You can find the Serial Number located under the battery.

Register your Product Online

Registering your new Microvision product online is quick and easy. Your registration will allow us to serve you better over the lifetime of your product. Being a registered owner also keeps you informed of important product notifications and helps us continue to design products that meet your needs. Please plan to have the Product Serial Number.

www.microvision.com/showwx/register

INFORMACIÓN IMPORTANTE DE SEGURIDAD

LEA, ENTIENDA Y SIGA TODA LA INFORMACIÓN DE SEGURIDAD CONTENIDA EN ESTA GUÍA DEL USUARIO ANTES DE USAR ESTE PROYECTOR. NO CONFIGURAR, USAR Y CUIDAR EN FORMA ADECUADA ESTE PROYECTOR PUEDE INCREMENTAR EL RIESGO DE PRODUCIR DAÑOS O DETERIORES EN EL PROYECTOR. CONSERVE ESTA GUÍA DEL USUARIO PARA REFERENCIA FUTURA.

Declaración de uso previsto

El proyector SHOWWX™ Laser Pico ha sido diseñado para operar con la batería Microvision especificada y el cargador de baterías Microvision, en el entorno propio de la casa o la oficina dentro de los siguientes parámetros:

- » Temperatura de funcionamiento: 10 °C a 30 °C, (50 °F a 86 °F)
- » Temperatura de almacenamiento: sin funcionamiento: -20 °C a 60 °C, (-4 °F a 140 °F) con batería
- » Humedad: 10% a 85% de humedad relativa [sin condensación]
- » Altitud: 152 a 4572 m (500 a 15,000 pies)



ADVERTENCIA

Indica una situación de peligro potencial, que de no ser evitada, puede ocasionar la muerte o graves daños o deterioros a la propiedad.

COMO CON CUALQUIER FUENTE DE LUZ BRILLANTE, NO VEA FIJAMENTE EL RAYO. VER FIJAMENTE EL RAYO PUEDE CAUSAR MOLESTIAS EN LOS OJOS Y VISIÓN DEFECTUOSA.

COMO CON CUALQUIER PRODUCTO QUE CONTENGA LÁSERES, NO DESENSAMBLE POR NINGUNA RAZÓN EL PROYECTOR. DESENSAMBLAR EL PROYECTOR PUEDE OCASIONAR QUE SE EXPONGA A LA PELIGROSA RADIACIÓN LÁSER.

CON LA EXCEPCIÓN DE LA APERTURA DE LA PUERTA DE LA BATERÍA, COMO SE INDICA EN LA GUÍA DEL USUARIO, PARA REEMPLAZARLA, NO HAY PIEZAS QUE EL USUARIO PUEDA REPARAR ADENTRO DEL PROYECTOR.

Para reparar o darle mantenimiento, el producto debe enviarse a un establecimiento autorizado de reparación y mantenimiento. Consulte la sección de Servicio al Cliente de esta Guía del usuario para obtener más información.

Para evitar los riesgos asociados con la exposición al láser:

- » No se recomienda el uso del producto por niños menores de 14 años, a menos que estén supervisados por un adulto. El SHOWWX no es un juguete.
- » El empleo de controles, ajustes o procedimientos que no estén especificados en esta Guía del Usuario puede producir exposición a la peligrosa radiación láser.

Para evitar los riesgos asociados con voltaje peligroso:

- » No modifique este producto de ningún modo. Use sólo piezas de reemplazo aprobadas por Microvision.
- » No use el adaptador de corriente alterna en un ambiente húmedo.
- » No use un adaptador de corriente alterna dañado. Reemplace el adaptador de corriente alterna dañado antes de usarlo.

Para evitar riesgos asociados con incendios y explosiones:

- » No sumerja el proyector o la batería en ningún líquido ni permita que alguno de ellos se moje.
- » Use sólo el adaptador de corriente alterna y la batería proporcionados por Microvision.
- » No desensamble ni modifique la batería de ningún modo.
- » No intente poner la batería en cortocircuito.
- » No exponga la batería a temperaturas bajo -20 °C o sobre 60 °C.
- » No aplaste la batería.
- » No sobrecargue ni descargue rápidamente la batería.
- » No elimine la batería a través de incineración o fuego.
- » No exponga el proyector ni la batería a la luz solar directa en un espacio cerrado, como en un vehículo.

Para evitar los riesgos asociados con otros daños:

- » No manipule una batería dañada o que presenta una filtración.
- » No manipule una batería que ha sido manipulada de una manera inadecuada o peligrosa.

Para evitar los riesgos asociados con la distracción del conductor en un vehículo en movimiento:

- » No use este proyector en un vehículo en movimiento de forma que pueda distraer al conductor.

⚠ PRECAUCIÓN

Indica una situación de peligro potencial, que de no ser evitada, puede ocasionar lesiones de poca o mediana gravedad o daños a la propiedad.

- » No apunte la imagen proyectada sobre personas, vehículos o aviones.
- » Existe riesgo de explosión al reemplazar la batería por un tipo de batería incorrecto.
- » Elimine las baterías usadas según las instrucciones contenidas dentro de esta guía.

Para evitar los riesgos asociados con la contaminación ambiental:

- » Elimine todos los componentes del sistema de conformidad con la legislación gubernamental que corresponda.

Para evitar los riesgos asociados con caídas y tropezones:

- » Coloque el cable de carga y los cables de datos de modo que no se pueda tropezar con ellos.

Advertencia sobre epilepsia fotosensitiva:

Un porcentaje muy pequeño de personas puede sufrir convulsiones o desmayos desencadenados por destellos de luz o ciertas imágenes visuales, incluidas las luces o patrones centelleantes que pueden aparecer en juegos de vídeo u otras imágenes de vídeo. Incluso las personas que no tienen antecedentes de convulsiones ni desmayos pueden sufrir "convulsiones epilépticas fotosensitivas" mientras miran algunas imágenes de vídeo.

De inmediato deje de observar las imágenes de vídeo proyectadas y consulte a un médico si presenta síntomas, como mareos, visión alterada, espasmos faciales u oculares, convulsiones, desorientación, confusión o pérdida temporal del conocimiento.

Tomar las siguientes precauciones al observar vídeos puede ayudar a reducir el riesgo de presentar convulsiones epilépticas fotosensitivas.

- » No lo use cuando esté cansado o fatigado.
- » Tome descansos frecuentes.
- » Aparte la mirada de la pantalla de vez en cuando.
- » Siéntese lejos de la imagen proyectada.

ETIQUETAS DE SEGURIDAD

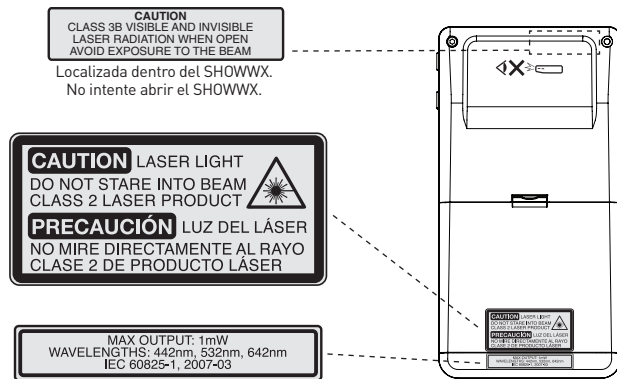
El proyector SHOWWX™ Laser Pico es un PRODUCTO LÁSER DE CLASE 2, de acuerdo a la definición contenida en la norma 60825-1 (marzo de 2007) de la Comisión Electrotécnica Internacional (IEC). Microvision ha diseñado el SHOWWX de modo que sea seguro para el uso general de un proyector portátil.

Declaraciones de conformidad con la Comisión Electrotécnica Internacional (IEC) y el Centro para Dispositivos y Salud Radiológica (CDRH)

El SHOWWX cumple con la norma 60825-1 (marzo de 2007) de la IEC. El dispositivo también cumple con las disposiciones de las secciones 1040.10 y 1040.11 del Título 21 del Código de Reglamentos Federales (CFR), excepto por las desviaciones sujetas a la Notificación para Láser N° 50 fechada el 24 de junio de 2007.

Las siguientes etiquetas de seguridad se colocan en la fábrica.

Estas etiquetas contienen importante información de seguridad. No las remueva.



ESPECIFICACIONES DEL LÁSER

Color de láser	Rojo		Azul		Verde	
Tipo de láser	Diodo láser de AlGaInP		Diodo láser de GaN		Diodo láser IR de doble frecuencia	
Salida máx. de onda continua [CW]	90 mW		50 mW		60 mW	
Divergencia en el eje lento	7°, FWHM	13°, FWHM	4°, FWHM	15°, FWHM	5°, 1/e2	10°, 1/e2
Divergencia en el eje rápido	16°, FWHM	24°, FWHM	15°, WHM	25°, FWHM	12°, 1/e2	18°, 1/e2
Longitud de onda	635 nm	645 nm	440 nm	460 nm	526 nm	537 nm

Declaración de conformidad con la Co-misión Federal de Comunicaciones (FCC)

Este dispositivo cumple con la Parte 15 de las normas de la Comisión Federal de Comunicaciones. La operación está sujeta a las dos condiciones siguientes: (1) este dispositivo no puede causar interferencia perjudicial; (2) este dispositivo debe aceptar cualquier interferencia recibida, incluida la interferencia que pueda causar operaciones no deseadas. Esto afecta a todas las opciones de productos.

Declaración de interferencia de radiofrecuencia de la Comisión Federal de Comunicaciones (FCC)

Nota: Este equipo ha sido probado y se ha encontrado que cumple con los límites para un dispositivo digital de Clase B, de conformidad con la Parte 15 de las Normas de la Comisión Federal de Comunicaciones (FCC). Estos límites han sido diseñados para proporcionar una protección razonable contra la interferencia perjudicial en una instalación residencial. Este equipo genera, usa y puede irradiar energía de radiofrecuencia y, si no se instala y se usa de acuerdo con las instrucciones, puede causar interferencia perjudicial a las comunicaciones de radio. Sin embargo, no se garantiza que no habrá interferencia en una instalación particular. Si este equipo causara interferencia perjudicial a la recepción de la radio o la televisión, lo cual puede ser determinado al apagar y encender el equipo, se recomienda al usuario intentar corregir la interferencia con uno o más de las siguientes medidas:

- » Reorientar o relocalizar la antena receptora.
- » Aumentar la separación entre el equipo y el receptor.
- » Conectar el equipo a un tomacorriente ubicado en un circuito diferente al circuito donde el receptor está conectado.
- » Solicitar ayuda al distribuidor o a un técnico en radio o televisión con experiencia. Para cumplir con los requisitos de cumplimiento referentes a la exposición a radiofrecuencia de la Comisión Federal de Comunicaciones (FCC), debe mantenerse una distancia de separación de al menos 20 cm entre la antena de este dispositivo y todas las personas.

Este transmisor no debe colocarse u operarse en conjunto con cualquier otra antena o transmisor.

PRECAUCIÓN: Los cambios o modificaciones realizados a este equipo que no hayan sido expresamente aprobados por el fabricante pueden anular la autoridad del usuario para operar este equipo.

Declaración de conformidad con la marca CE (Conformidad Europea)

Este producto cumple con los requisitos de la Directiva 2006/95/EC sobre bajo voltaje y la Directiva 2004/108/EC sobre compatibilidad electromagnética, y por consiguiente lleva la marca CE.



Instrucciones para reciclar la batería

Recicle la batería de conformidad con las leyes locales. En los Estados Unidos y en Canadá, visite www.call2recycle.org o llame al 1-800-8-BATTERY (1-800-822-8837) o al 1-877-2-RECYCLE (1-877-273-2925) para conocer el centro de reciclaje más cercano.



Eliminación del producto

El proyector SHOWWX™ Laser Pico no debe colocarse en los contenedores de basura domésticos.



Examine la reglamentación local para obtener información acerca de la eliminación de productos electrónicos en su área.

Fabricado para iPod® (Made for iPod®)

"Fabricado para iPod" significa que un accesorio electrónico ha sido diseñado para conectarse específicamente a un iPod y que ha sido certificado por el desarrollador para cumplir con los estándares de desempeño de Apple. Apple no es responsable de la operación de este dispositivo o de su cumplimiento con los estándares reglamentarios y de seguridad.



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